



Docket No. 67,010-006
H-2603- Sundyne

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: James Larry Jones
Serial No.: 09/862,910
Group Art Unit: 3743
Filed: May 22, 2001
Examiner: Leonard R. Leo
For: TUBE TYPE HEAT EXCHANGER WITH MOTOR OR
GENERATOR HOUSING

REPLY BRIEF

Box AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This paper is responsive to the Examiner's Answer mailed June 17, 2003.

The Examiner's revised statement under the status of claims is correct. The Examiner's revised statement under issues is correct when read in conjunction with the Appellant's Statement of the Issues.

Reply to the Examiner's Response to Arguments

On page 5 of the Examiner's Answer, the Examiner states that "Appellant's remarks are not commensurate in scope with the claims," for the reason that the Appellant does not claim stainless steel as a housing material, nor its thickness. The Examiner misses the point. When Appellant discusses stainless steel in the remarks section, Appellant is not arguing that stainless steel is a

limitation of any of the claims. Rather, Appellant is arguing that the Examiner must acknowledge that central to the Admitted Prior Art's problem is the reduction of the use of stainless steel. That is, just as with any reference relied upon by the Examiner, the Examiner must look at the problem being addressed by the reference when evaluating whether there is a motivation to one of ordinary skill in the art to modify that reference. Said another way, the Examiner is not permitted to ignore the relevance of stainless steel in the Admitted Prior Art just because it is not a recited limitation to the claims.

With regard to the Examiner's statement on page 5 that he is unaware of any instance where improved heat transfer is an unwanted condition, the Appellant does not disagree. However, *Litton* does not establish explicitly or implicitly that it would provide improved heat transfer over the cooling device described in the Admitted Prior Art. Again, the device described in the Admitted Prior Art does not lack sufficient heat transfer, but rather utilizes a cooling device that is constructed from a costly amount of stainless steel. Furthermore, in the last sentence of page 1 of the Background of the Invention, the Admitted Prior Art is not seeking to improve heat transfer but rather seeks "an improved cooling device for electric motors and generators that minimizes the use of stainless steel while still provided effective cooling." One would not modify the Admitted Prior Art with *Litton* because (1) the Admitted Prior Art does not have a problem with cooling, and (2) even using the Examiner's motivation of "improved heat transfer," *Litton* does not establish that the heat transfer would be improved by utilizing the helical structure over what is presently used by the Admitted Prior Art. Accordingly, the combination is improper.

The Examiner makes a statement on page 6 that "the helical cooling coil 34 is an alternate of the cooling jacket 14 in Figure 1 of *Litton*, which is similar to Appellant's Prior Art Figure 1."

This is not sufficient to support a *prima facie* case of obviousness and the necessary motivation to one of ordinary skill in the art to modify what is taught in the Admitted Prior Art. The Examiner cannot avoid establishing that it would be obvious to one of ordinary skill in the art to modify the Admitted Prior Art with *Litton* by merely stating that “cooling coils disposed around central heat generating structures are well known in the art.” The Appellant is not simply claiming cooling coils disposed around a central heat generating structure but rather a magnetic field member, a shaft, windings producing heat, etc.

With regard to claim 13, the Examiner attempts to sidestep his burden to establish a *prima facie* case of obviousness by stating that brazing is “a mere preference...[and] produces no new and/or unexpected result and solves no stated problem.” Appellant is not required to prove unexpected results in order to overcome the rejection. Establishing unexpected results is only one way of rebutting an obviousness rejection. Significantly, the Examiner has not provided any reference in the combination that teaches brazing at all. How can the Examiner argue that he has established a *prima facie* case of obviousness when one of the limitations is missing from the references? With regard to the Appellant’s submission of the publication, “Manufacturing, Engineering and Technology,” the submission was provided in response to the Examiner’s arguments regarding brazing advanced late in the prosecution of the application. The Appellant provided the Examiner with the reference as soon as it was apparent that there was a disagreement over its meaning.

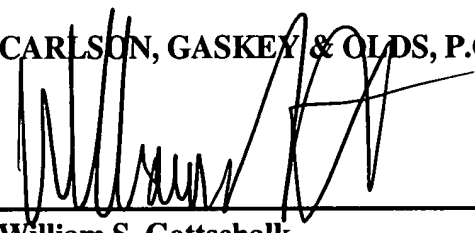
The Examiner cannot claim that a dictionary definition represents an accurate meaning of the term “brazing” to one of ordinary skill in the art. Clearly, an engineer in the aerospace industry would know more than a simplified, lay definition of braze as “to solder together using a hard

solder with a high melting point.” The definition Appellant provided to the Examiner is out of a technical book providing a definition that will be familiar to any engineer. It is readily apparent that the definition provided by the Examiner is of a non-technical nature. Moreover, in fairness to the Appellant, the Examiner must provide a copy of the page from the dictionary to the Appellant. Typically, more than one definition is outlined for a term in the dictionary. The Examiner’s characterization of *Schade, Jr.* as teaching “solder/braze” is inaccurate since *Schade, Jr.* does not teach brazing. Soldering and brazing are not equivalent or the same to one of ordinary skill in the art.

For the reasons set forth above, Applicant submits that the pending claims in the application are allowable. Applicant respectfully solicits allowance of these claims. The Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Respectfully submitted,

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August 18, 2003
Date

CERTIFICATE OF MAIL

I hereby certify that the enclosed **Response (in triplicate)** is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Mail Stop AF Commissioner for Patents P. O. Box 1450, Alexandria, VA 22313-1450 on August 18, 2003



Theresa M. Palmateer

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